

DETAILED DESCRIPTION OF THE INVENTION

amend the last paragraph to read as follows:

B¹ ~~A pair of mechanical operating members, for example, constituted by selection and~~
engagement levers, E and S respectively, project from the gearbox casing B, also in known
manner, their combined movement enabling the various transmission ratios of the gearbox C to
be engaged.

Page 8, amend the first two paragraphs to read as follows:

B² ~~A respective push-pull cable 3, 4, that is, a cable including a sheath 3b, 4b inside which~~
a flexible cable 3a, 4a can slide, is preferably connected to each of these levers. The sheath 3b,
4b extends, in particular, between two opposed reaction elements one of which is formed, for
example, by an abutment element 6 fixed to the casing B, whilst the other is advantageously
constituted by a fireproof partition P separating the engine compartment V and a passenger
compartment A of the motor vehicle. The flexible cables 3a, 4a extend through the partition P
and each is connected to the end of a respective shaft 13, 14 which extends from a control unit 9
mounted in the compartment A in the vicinity of the partition P.

The control unit 9 houses a pair of servomechanisms, each of which includes an
electromechanical linear actuator for controlling the movement of the respective cable 3a, 4a,
and only one of which is shown in Figure 2, in which it is indicated 9a.

Page 9, amend the first full paragraph through to the first full paragraph on page 10 to
read as follows:

- A set of teeth 21 is formed on the external surface of the casing 17 for engagement by a corresponding set of teeth of a first gear 25 of a reduction unit 23. The reduction unit 23 also comprises another gear 27 connected rigidly to the gear 25 and mounted coaxially therewith so as to be freely rotatable on a shaft 29 parallel to the axis of movement of the screw 15 relative to the internal thread 19, the gears 25 and 27 being fixed for rotation together. The gear 27 in turn meshes with a pinion 31 keyed to a drive shaft 33 of an electric motor 35 the axis of which is parallel to the shaft 13. The motor 35 is supported by a frame 37 having a pair of opposed main walls 37a, 37b connected to one another by fixing pillars, each wall 37a, 37b having a respective through-hole 38a, 38b through which the shafts 13 and 13a can extend.

B³ The motor 35 is connected by means of wiring 40 to an electronic control unit 41 which in turn is connected by means of further wiring 42 to a sensor unit 44 of a gearshift lever L. The lever L may, in particular, be movable so as to reach a plurality of positions arranged in a grid-like configuration, for example, of the type corresponding to that of normal mechanical gearshifts.

Within the sensor unit 44 there are sensor means which are not shown in detail since they are of known type or are within the capabilities of an expert in the art, and which can recognize the reaching, by the lever L, of each of its positions corresponding to the engagement of a gear of the gearbox C.

The signals detected by the sensors associated with the sensor unit 44 are therefore transmitted by means of the wiring 42 to the electronic control unit 41 which processes them and generates corresponding signals for operating the actuators 9a. These signals are then transmitted to the